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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/695,437	10/24/2000	Carl W Anderson	BSA 01-02	2813
26302	7590	01/14/2004	EXAMINER	
BROOKHAVEN SCIENCE ASSOCIATES/ BROOKHAVEN NATIONAL LABORATORY BLDG. 475D - P.O. BOX 5000 UPTON, NY 11973			PROUTY, REBECCA E	
			ART UNIT	PAPER NUMBER
			1652	

DATE MAILED: 01/14/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/695,437	Applicant(s) ANDERSON ET AL.	
	Examiner Rebecca E. Prouty	Art Unit 1652	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on 14 October 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 23, 29, 33, 35-40, 44, 46, 47, 49-52 and 99-105 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 35 is/are allowed.
- 6) ☒ Claim(s) 23, 29, 33, 36-40, 44, 46, 47, 49-52 and 99-105 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

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Claims 1-22, 24-28, 30-32, 34, 41-43, 45, 48, 53-98, and 106-111 have been canceled. Claims 23, 29, 33, 35-40, 44, 46, 47, 49-52, and 99-105 are still at issue and are present for examination. It is noted that claims 1-22, 25-28, 53-98 and 106-111 which were previously withdrawn by the examiner are canceled herein on page 14 of the current response but listed on the current copy of the claims as withdrawn. As the claims have been canceled by applicants it is requested that all future copies of the claims list these claims as canceled to avoid any confusion as to their status.

Applicants' arguments filed on 10/14/03, have been fully considered and are deemed to be persuasive to overcome some of the rejections previously applied. Rejections and/or objections not reiterated from previous office actions are hereby withdrawn.

Claims 23, 29, 33, 36-40, 44, 46, 47, 49-52, and 99-105 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 23, 36, and 99 (upon which Claims 29, 33, 37-40, 44, 46, 47, 49-52 and 100-105 depend) are confusing in the recitation of "phosphorylation site consensus sequence motif for another protein kinase" as it fails to define for what kinase. There are

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many different kinases which have a wide variety of different phosphorylation site consensus sequence motifs not all of which are clearly defined in the art or the specification and many such sites which remain to be defined. There is no means of knowing if a peptide has a phosphorylation site for the enormous number of unknown protein kinases.

Applicants response to the instant rejection implies that the intended meaning of this phrase is the exclusion of serine, threonine and tyrosine residues from the spacer sequences. However, there are protein kinases known in the art that phosphorylate other amino acids besides serine, threonine and tyrosine (for example, histidine and proline) and not all serine, threonine or tyrosine residues necessarily are within a consensus sequence for a protein kinase. As such the scope of sequences encompassed is unclear. If applicants intended meaning is as implied in the response it is suggested that the claims be amended to replace "does not provide a phosphorylation site consensus sequence motif for another protein kinase" with the explicit language "does not include the amino acids serine, threonine and tyrosine". For examination purposes the phrase will be presumed to be as suggested. It should be noted however, that given this interpretation, Claim 29 is not further limiting of Claim 23.

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Applicant is advised that should claim 33 be found allowable, claim 35 will be objected to under 37 CFR 1.75 as being a substantial duplicate thereof. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k). Each of these claims recites compositions comprised of the same identical group of peptides.

Claims 33, 44, and 101 are confusing in the recitation of a peptide within the recited Markush group which does not meet the limitations of the generic claim from which they depend (i.e., Claims 23, 36 or 99). The Markush group of these claims includes SEQ ID NO:15 which includes two phosphate-accepting amino acid pairs selected from the group SQ, QS, TQ and QT (i.e. QS at residues 4-5 and SQ at residues 5-6 of SEQ ID NO:15). For purposes of examination it is assumed that applicants intent was to recite one phosphate-accepting serine or threonine residue found within an amino acid pair selected from the group SQ, QS, TQ and QT.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

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A person shall be entitled to a patent unless -

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 29 and 33 are rejected under 35 U.S.C. 102(b) as being anticipated by Lees-Miller et al. (1992).

Applicants argue that pages 14-16 of the grandfather application support the limitation to the first and second spacer sequences excluding serine, threonine and tyrosine as one of skill in the art would have known to exclude serine and threonine from the spacers and would have also known to exclude tyrosine from the spacers as being an amino acid that is commonly phosphorylated and which would therefore be a potential site for phosphorylation by another kinase. This is not persuasive because entitlement to a filing date does not extend to subject matter which is not disclosed, but would be obvious over what is expressly disclosed (See *Lockwood v. American Airlines Inc.* (41 USPQ2d 1961, 1966, CAFC 1997)). While one of skill in the art would recognize that one means of accomplishing the goal of excluding a phosphorylation site consensus sequence motif for another protein kinase (which clearly is supported in the grandparent application) might be the exclusion of amino acids

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which are commonly phosphorylated, it is clearly not the only means of doing so and further might not be completely successful as there are kinases known which phosphorylate other amino acids also. As such the grandparent application does not support the limitations of the instant claims.

Claim 23 is rejected under 35 U.S.C. 102(b) as being anticipated by Lam et al. The rejection is explained in the previous Office Action.

Applicants argue that Lam et al. is not applicable prior art as the face page of the Lees-Miller et al. publication shows that the manuscript was originally submitted for consideration for publication on April 9, 1992 and therefore the basis for the features recited in Claims 23 and 31, as herein amended, were in the inventor's possession prior to the Lam publication date of April 15, 1992. This is not persuasive any evidence showing a date of invention prior to that of the cited reference for purposes of antedating the reference must be submitted in a 37 CFR 1.131 declaration. Furthermore the Lam et al. reference is a statutory bar under 35 U.S.C. 102(b) as it was published more than a year before the filing date of the grandparent application (10/6/93) and thus cannot be overcome by an affidavit or declaration under 37 CFR 1.131. Applicants further argue that Claim 23 is not anticipated by the peptide disclosed by Lam et

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al. as the peptide Pro-17-Gly includes additional serine and threonine residues which could potentially be phosphorylated by another protein kinase. This is not persuasive because the mere presence of an serine or threonine residue is not a showing that this residue is present within a phosphorylation site consensus sequence motif for another protein kinase. There is nothing to suggest that either of these residues is present within a phosphorylation site consensus sequence motif for another protein kinase and thus the peptide of Lam et al. does anticipate Claim 23.

The rejections under 102(b) over Vojtesek et al. and under 103 over Chen et al. in view of Glass et al. are withdrawn in view of the limitation of the claims to compositions or kit comprising a peptide with only one phosphate-accepting serine or threonine residue found within an amino acid pair selected from the group SQ, QS, TQ and QT. Each of the peptides of Vojtesek et al. and Chen et al. include more than one serine or threonine residue found within an amino acid pair selected from the group SQ, QS, TQ and QT.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL.** See MPEP § 706.07(a). Applicant is

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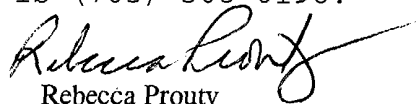
reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rebecca Prouty, Ph.D. whose telephone number is (703) 308-4000. The examiner can normally be reached on Monday-Friday from 8:30 to 4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ponnathapu Achutamurthy, can be reached at (703) 308-3804. The fax phone number for this Group is (703) 308-4242.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-0196.


Rebecca Prouty
Primary Examiner
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